

A COMPREHENSIVE LITERATURE REVIEW OF MARINE BIODIVERSITY IN HONG KONG

Terence P.T. Ng, Martin C.F. Cheng, Gray A. Williams and Kenneth M.Y. Leung

The Swire Institute of Marine Science and School of Biological Sciences, The University of Hong Kong, Hong Kong SAR, China

With the implementation of the Convention on Biodiversity (CBD), local and regional species inventories are becoming increasingly important for biodiversity assessments, marine resource monitoring and management, yet such inventories are often incomplete or compromised by not being updated by experts. The South China Sea, for example, is among the world's most species-rich marine areas but it is also one of the areas where species information is poorly categorized. Hong Kong's marine biota is relatively well explored and documented among the South China Sea region, and this study integrates most available species information to construct a species inventory. The coastline of Hong Kong is characterized by a range of diverse habitats such as wetlands, mudflats, mangroves, seagrass beds, rocky shores, boulder shores, sandy shores, rocky reefs and soft sub-tidal seabeds which support an enormous array of marine life. Despite having a small marine area (1,651 km²), a total of close to 6,000 marine species were recorded in Hong Kong waters. Most of these species were reported during the 1980s and 1990s, but new species continue to be discovered. Even though Hong Kong's marine area is only about 0.03% of that of China, the number of marine species recorded in Hong Kong already accounts for ~26% of the total recorded for China seas. In terms of number of species per unit marine area, Hong Kong shows a disproportionally high marine biodiversity (at least a few hundred times higher) when compared with many other regions. Presumably, Hong Kong also contributes to a considerable amount of the species recorded in the South China Sea, but such results are confounded by the lack of knowledge and inventories on marine biodiversity in the region. Our findings are concordant with those of the Census of Marine Life, reaffirming that Hong Kong lies within the world's marine biodiversity hotspot. Information from our study will make an important contribution to biodiversity conservation in Hong Kong, especially in light of the recent implementation of the HK SAR Governments Biodiversity Strategy and Action Plan (BSAP) under the CBD.